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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,765

05/04/2005

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MTS-3555US

7905

23122 7590 09/16/2009  
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EXAMINER

HSU, AMY R

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

09/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,765	<b>Applicant(s)</b> TAKASHIMA, TORU	
	<b>Examiner</b> AMY HSU	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,15-31,33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,15-31,33 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/30/09 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 15-31, and 33-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 15-17, 22-23, 26-31, 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Hulvey (US 7260357).

Regarding Claim 1, Hulvey teaches a slave apparatus capable of communicating with a master device through a predetermined communication bus (*Fig. 1A master and slave devices*) and having a plurality of communication modes of diverse kinds, said slave apparatus comprising:

a communication controlling unit operable to select a communication mode from the plurality of communication modes (*Fig. 12 B and Col 10 Lines 40-45 teaches different ranges of frequencies of a page hopping sequences as different modes with which to communication with the master device*); and

a judging unit operable to transmit to said master device a notification code for notifying the communication mode presently selected by said communication controlling unit (*Col 9 Lines 45-50 teaches the slave device sends its clock information in a frequency hopping synchronization packet, which indicates which mode or frequency it is monitoring*), and then judge whether a command in response to said notification code is received from said master device within a predetermined time or not (*Col 10 Lines 1-10*), wherein:

said communication controlling unit performs control on the basis of a judgment result of said judging means in such a manner that (1) when the command in response to said notification code is received from said master device within the predetermined time, a state permitting communication with said master device is determined based on the received command (*connection is established when a response is received from the master as in Col 10 Lines 1-10*), and that (2) when said command is not received within

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said predetermined time, said communication controlling unit electrically releases connection to said master device temporarily (*Col 10 Lines 58-63 teaches when the slave does not receive a signal from the master it will give up, and Fig. 9 shows giving up goes into a power down mode, Col 9 Lines 9-12 teaches power down disconnects a voltage source*) and then restores the connection (*Fig. 13 reference number 1306 represents restoring of connection from power down or electrically disconnected state*) and

by the time when said slave apparatus and said master device resume communication as a result of said restoration of connection, said communication controlling unit selects a communication mode from the plurality of communication modes so that its presently set-up communication mode is changed to a different communication mode from that used immediately before said release (*Col 10 Lines 50-55 teaches the slave changes its mode or frequency receiving range if not response is received from the master*) .

Claim 15 is rejected similarly to claim 1.

Regarding Claim 16, Hulvey teaches a slave apparatus capable of communicating with a master device through a predetermined communication bus and having a plurality of communication modes of diverse kinds, said slave apparatus comprising:

a communication controlling unit operable to select a communication mode from the plurality of communication modes (Fig. 12 B and Col 10 Lines 40-45 teaches different ranges of frequencies of a page hopping sequences as different modes with

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which to communication with the master device); and

a communication mode identifying unit operable to transmit to said master device a notification code for notifying the communication mode presently selected by said a communication controlling unit (Col 9 Lines 45-50), and then identify the kind of communication mode corresponding to a command received from said master device in response to said notification code (Col 10 Lines 43-45), wherein:

said communication controlling unit performs control such as to change its own communication mode in correspondence to an identification result of said communication mode identifying unit and then establish a state permitting communication with said master device (Col 10 Lines 50-55 teaches changes the mode to establish communication with the master).

Regarding Claim 17, Hulvey teaches the slave apparatus according to claims 1, 15 or 16, wherein said predetermined communication bus is a universal serial bus ("USB") type (*Col 1 Lines 34-35 teaches the connection can be through USB*).

Regarding Claim 22, Hulvey teaches the slave apparatus according to claim 17, wherein said USB embodied as a wire USB cable (*Col 1 Line 35*).

Regarding Claim 23, Hulvey teaches the slave apparatus according to claim 17, wherein said USB is embodied as a wireless circuit (*Col 2 Lines 7-9*).

Claims 26-28 are method claims corresponding to the apparatus of Claims 1, 15, and 16, and Claims 29-31 are computer programs corresponding to the apparatus of claims 1, 15-16 and are rejected similarly.

Regarding Claim 33, Hulvey teaches an information processing apparatus comprising a slave apparatus according to claims 1, 15 or 16, and capable of communicating with said master device (Fig. 1A).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-19, 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Hulvey (US 7260357) in view of Watanabe et al. (US 7432948).

Regarding Claims 18-19, Hulvey teaches the slave apparatus according to claim 17, but does not teach the well known specifics of USB technology. Watanabe teaches controlling connection of devices connected by USB of release by pulling up or pulling down a voltage applied to a D+ or a D- line of said USB (*Fig. 10 and Col 7 Lines 38-40*), or release by turning OFF a Vbus line through which a voltage from said host device is supplied in said USB (*Fig. 10 reference number 140*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Hulvey with that of Watanabe to realize the well known specifics of USB for connection between two communication devices.

Regarding Claim 24, Hulvey teaches the slave apparatus according to claims 1, 15 or 16, but does not teach displaying information on a communication state including

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information concerning a communication mode presently set up. The communication mode in Hulvey is to establish connection between the master and slave device without user interference or choice. However, in the case where the communication mode is to be chosen by the user, it would be obvious to one of ordinary skill to include a display to allow the user to interface. Watanabe teaches such a situation where the user can select a communication mode and Col 4 Line 63 through Col 5 Line 2 teaches a display which shows information from various menus and communication mode can be selected from the slave side via a user interface which is the LCD. The instant claims to not require that the communication mode is selectable by the user, but it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Hulvey with that of Watanabe to realize a system which allows the user to choose a communication mode and thus to view it via a user interface including a monitor.

***Allowable Subject Matter***

7. Claim 34 allowed.
8. Claims 20-21, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY HSU whose telephone number is (571)270-3012. The examiner can normally be reached on M-F 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy Hsu/  
Examiner, Art Unit 2622

/Timothy J Henn/  
Primary Examiner, Art Unit 2622